

REMARKS

Claims 1 through 13 are pending in this application. Claims 1, 6, and 10 are amended herein. New claim 13 is added herein. Support for the amendment to claims 1 and 10 is shown in Fig. 3. Support for new claim 13 may be found in claim 1 as originally filed and at page 3, lines 12 through 15 of the specification as originally filed. Reconsideration of the application is requested based on the foregoing amendment and the following remarks.

Objections to the Drawings:

The drawings have been objected to under 37 C.F.R. § 1.84(p)(5) for including a reference sign not mentioned in the description. Reference numeral "103a" has been removed from Figure 15 of the corrected drawings. Withdrawal of the objection to the drawings is earnestly solicited.

Objection to the Claims:

Claim 1 was objected to for lacking an antecedent basis. Claim 1 has consequently been amended to supply an antecedent basis. Withdrawal of the objection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 112:

Claim 6 was rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claim 6 has consequently been amended to make it more definite. Withdrawal of the rejection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 102:

Claims 1 through 3, 5 through 8, and 10 through 12 were rejected under 35 U.S.C. § 102(b) as anticipated by Kimura, US 6,322,875. The rejection is traversed to the extent it might apply to the claims as amended. Reconsideration of the rejection is respectfully requested.

Amended claim 1 recites, in pertinent part,

"wherein said film is in the form of a sheet."

It is submitted respectfully that Kimura neither teaches, discloses, nor suggests a film in the form of a sheet, as recited in amended claim 1. In Kimura, rather,

i) Rainbow-colored brilliance is obtained by including an inorganic thin membrane having a desired membrane thickness and a desired transmittance.

(ii) The inorganic thin membrane is arranged on a front or back surface of a key top.

(iii) The inorganic thin membrane is formed by vacuum deposition or sputtering.

(iv) When the inorganic thin membrane is provided on the front surface of the key top, transparent urethane coating is applied to cover the inorganic thin membrane to protect the inorganic thin membrane.

This is to be contrasted with the claimed invention, in which:

(i) In a film key filled with resin, a layer exhibiting a metallic color is formed (by plating, deposition or printing on a backside of the film.

(ii) The film is transparent, and is either colored or colorless.

(iii) A transparent layer having a desired design is provided between the backside of the film and the metallic-colored layer to provide an improvement in design.

(iv) A protective film is provided on the metallic-colored layer on the backside of the film to prevent discoloration, color unevenness or the like of the metallic-colored layer that is caused by the heat generated during injection molding. That is, the protective film is interposed between the filled resin and the metallic-colored layer.

Conventionally, plating is applied onto a resin key top to provide a press button switch exhibiting a metallic color. However, there is a restriction that only the color of metal itself can be selected for the key top design.

To achieve a design having colors other than that of metal itself, there is a method for carrying out a color coating on a metal layer. However, coating has inferior wear resistance and easily comes off to expose the metal layer when the switch is repeatedly operated.

Therefore, the present invention provides a press button switch which exhibits a metallic color and has a high degree of freedom in design by providing the metallic-colored layer on a backside of a film (such as PC or PET) having higher wear resistance than that of the coating.

On the other hand the structure according to Kimura differs from that of the present application, as follows.

(i) In the reference, transparent urethane coating is simply applied to protect the inorganic thin membrane, and the transparent urethane coating does not have the form of a sheet. In contrast, the present invention uses a film in the form of a *sheet*, which provides wear resistance higher than that of Kimura.

(ii) In Kimura, the inorganic thin membrane to obtain rainbow-colored brilliance is provided on a front or back surface of the resin key top by vacuum evaporation or sputtering, and the inorganic thin membrane does not form a film in the form of a sheet.

(iii) In Kimura although a transparent urethane coating is applied to protect the inorganic thin membrane, there is no specific description of the purpose of the protection, such as to protect it from scratching, wearing or oxidation.

(iv) If the coating is intended to protect the membrane from wear, it would not effectively protect the membrane.

Amended claim 1 is thus submitted to be allowable. Withdrawal of the rejection of amended claim 1 is earnestly solicited.

Claim 2 recites, in pertinent part,

"wherein said film is a color film."

It is submitted respectfully that Kimura neither teaches, discloses, nor suggests a film which is a color film, as recited in amended claim 1. Whether or not a colored transparent layer would be acceptable or not, as asserted in the Office Action at page 4, is submitted to be of no relevance to a rejection under 35 U.S.C. § 102(b).

Claims 3 through 9 depend from amended claim 1 and add further distinguishing elements. Claims 3 through 9 are thus also submitted to be allowable. Withdrawal of the rejection of claims 3 through 9 is earnestly solicited.

Amended claim 10 recites, in pertinent part,

"wherein said film is in the form of a sheet."

It is submitted respectfully that Kimura neither teaches, discloses, nor suggests forming a film in the form of a sheet, as discussed above with respect to amended claim 1. Amended claim 10 is thus submitted to be allowable. Withdrawal of the rejection of amended claim 10 is earnestly solicited.

Claims 11 and 12 depend from amended claim 10 and add further distinguishing elements. Claims 11 and 12 are thus also submitted to be allowable. Withdrawal of the rejection of claims 11 and 12 is earnestly solicited.

New claim 13 recites, in pertinent part,

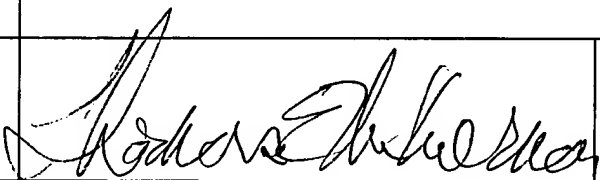
"said undercoat layer is formed by depositing metal on the film." Thus a metallic color similar to that of real metal can effectively be obtained. Kimura, furthermore, neither teaches, discloses, nor suggests depositing metal *on* a film.

Allowable Subject Matter:

The Applicants note that no specific grounds of rejection were lodged against either of claims 4 or 9. The Applicants thus presume that claims 4 and 9 are allowable.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all claims 1 through 13 are allowable over the cited references. Since the objections to the drawings and the claims have been addressed and the claims have been amended to overcome the rejections based on 35 U.S.C. § 112, second paragraph, it is submitted that all of claims 1 through 13 are now allowable. Allowance of all claims 1 through 13 and of this entire application are therefore respectfully requested.

RESPECTFULLY SUBMITTED,					
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Attachments: Marked-Up Copies of Amendments
2576-108.AMD

Version with markings to show changes made.

1. (Amended) A press button switch for a switching operation through the pressing of a button, comprising:

a base body of said button;

an undercoat layer which is formed on a surface of said base body and of which the surface, at least, exhibits a metallic color; [and]

a film which is formed over the surface of said undercoat layer so as to cover said undercoat layer and which allows [the] transmission of the metallic color of said undercoat layer; and
wherein said film is in the form of a sheet.

6. (Amended) The press button switch according to Claim 1, wherein said undercoat layer is a printed layer to which [the surface] a plating-type finish is applied.

10. (Amended) A method of manufacturing a press button switch for a switching operation through the pressing of a button, wherein:

a film with transmittance is formed in a button shape and, through contact with the button shape of a layered film wherein an undercoat layer of which the surface exhibits a metallic color, and said film [are] is layered, a base body fixed to said layered film is formed wherein said film is in the form of a sheet.